LETTER OF INTEREST

Provide the following information in this form or as narrative answers. Narrative answers can reference source documents (include the name of the document and relevant pages or sections). Provide any referenced documents as attachments.

Section A: Prospective Borrower Information

1. Legal name of prospective borrower:

City of Waukesha Water Utility

2. Other names under which the prospective borrower does business:

Waukesha Water Utility

3. Department and division name:

Not Applicable

4. Business street address:

115 Delafield St, Waukesha, WI 53187

5. Mailing street address (if different from above):

P.O. Box 1648, Waukesha, WI 53187-1648

6. Website:

www.waukesha-water.com

7. Employer/taxpayer identification number (EIN/TIN):

39-6005643

8. Dun and Bradstreet Data Universal Number System (DUNS) number:

124802919

9. Type of entity (check all that apply):

- ☐ Corporation
- ☐ Partnership
- ☐ Joint Venture
- ☐ Trust

- ☒ Federal, State, or Local Governmental Entity, Agency, or Instrumentality
- ☐ Tribal Government or Consortium of Tribal Governments
- ☐ State Infrastructure Finance Authority
- ☐ Combination of the Above Entities

10. Describe the organizational structure of the project(s) and attach an organizational chart illustrating this structure. Explain the relationship between the prospective borrower, the project, and other relevant parties. Include individual members or titles of the project team(s) and their past experiences with projects of similar size and scope. If multiple parties are involved in the project's construction, maintenance, and operation, describe the project's risk allocation framework.

The Great Water Alliance is the Waukesha Water Utility's Program to transition their water supply. The Utility is the prospective borrower, who is managing the Program, and they have assembled a team of experts to assist them in completing their water supply transition under the direction of Utility staff including three consulting firms and two key municipal partners. Refer to **Attachment A10-1** for the Organizational Structure of the Program. Greeley and Hansen is engaged in the Program as the Program Manager to meet the goals of delivering a reliable, high-quality Lake Michigan-supplied water system. Greeley and Hansen has an accomplished team of professionals which is a combination of local and national experts that have participated in multiple programs and projects of the size and scope similar to this Program. CH2M/Jacobs has been engaged as the Water Quality Transition experts and along with a team of nationally recognized academic resources, will develop the Water Transition Plan. Black and Veatch has been engaged as Construction Manager and they and their local partners will lead the construction inspection services, as they have done in multiple regions throughout the country. The two key municipal partnerships are with the City of Milwaukee and the City of Waukesha. The Utility has signed a wholesale water supplier contract and intergovernmental agreement with the City of Milwaukee Water Works to purchase water. The Utility has a memorandum of understanding with the City of Waukesha Department of Public Works, including the Clean Water Plant to meet the permit limits set forth in the WPDES permit for the Root River discharge as well as the Utility's Diversion permit.

The Program's risk allocation framework is such that all team members are responsible for managing risk in their areas of expertise. A risk management plan for the Program was developed to layout out a proactive system the Program team can use to minimize the conversion of risks to issues and utilize mitigation strategies that have been developed in anticipation of when risks cannot be avoided. The expectations for the Program Risk Management is for each program team member to have a role in the Risk Management of the program and for the plan will be integrated into the program delivery process, and involve all team members in the management of risks.

11. If the prospective borrower is not a public entity or in the case of the prospective borrower being a state infrastructure finance authority, the sub-recipient(s) is not a public entity, is the project(s) publicly sponsored? Please explain.

Not Applicable

12. When will the prospective borrower be prepared to submit an application? (Assume invitations to apply will be issued approximately 90 days from the close of the letter interest submission period).

April 30, 2019

Section B: Project Plan

1. Project name(s) *(for purposes of identification assign a short name to the project(s)):*

Great Lakes Water Supply Project (Great Water Alliance [GWA] Program)

2. National Pollutant Discharge Elimination System (NPDES) and/ or Public Water System (PWS) number (if applicable):

DNR PWS#: 26802380
WPDES #: WI-0029971-08-0

3. Project website(s):

www.greatwateralliance.com

4. Provide a brief description of the project(s) (major project scope items such as capacity, diameter and length, treatment components, and other design features):

The Waukesha Water Utility (Utility) is implementing a program to transition Waukesha, Wisconsin's water supply from groundwater to Lake Michigan water, known as the Great Water Alliance (Program). Waukesha's current water supply is severely depleted and contaminated with naturally-occurring radium. The project to provide Waukesha with a new, safe and sustainable water supply has been thoroughly analyzed by multiple jurisdictions through a 15 year process because it is the first project approved to use Great Lakes water for a community completely outside of that Basin under the terms of the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact). Waukesha will obtain Lake Michigan water from the Milwaukee Water Works (MWW) and also return it to Lake Michigan after use and high levels of wastewater treatment. The purpose of the Program is to plan, design, construct, and commission infrastructure with a 100-year useful life necessary to transition Waukesha's water supply. Key Program Elements associated with the Program are listed below and are shown in Figure ES-1, Program Diagram on page ES-4 of the Draft Preliminary Design Report included in Attachment B4-1.

1. **Water Supply Connection:** A connection will be made to an existing 54-inch MWW water distribution main in Milwaukee.
2. **Water Supply Pumping Station (WSPS):** A WSPS with a firm capacity of 15.2 million gallons per day (MGD) will be constructed in Milwaukee that provides the pumping capacity to convey water to Reservoirs near Waukesha. The WSPS will be owned and operated by MWW.
3. **Water Supply Pipeline and Appurtenances:** A 13.5-mile, 30-inch Water Supply Pipeline will be constructed to convey water from the WSPS to Reservoirs. Isolation valves, air and vacuum relief valves, and other appurtenances necessary for reliable conveyance will be provided.

4. **Reservoirs:** Two 10 million gallon reservoirs will be constructed near Waukesha to attenuate demands and provide water storage. An air break will be provided upstream of the Reservoirs to prevent backflow from the Reservoirs to the WSPS.
5. **Booster Pumping Station (BPS):** A BPS with a firm capacity of 15.75 MGD will be constructed near the Reservoirs to convey water from the Reservoirs to the Utility's existing distribution system.
6. **Chemical Feed Facilities:** Chemical feed facilities will be located at the BPS to provide the ability to adjust water quality characteristics, such as residual disinfectant and corrosion inhibitor levels.
7. **WWU Distribution System Connection:** A connection to the Utility's existing distribution system will be constructed, including a Water Supply Control Building (WSCB) located upstream of the new connection that maintains discharge pressures to the Utility's existing distribution system.
8. **WWU Distribution System Improvements:** Improvements to the Utility's existing distribution system will be constructed to manage the change in pressure distribution when switching from geographically dispersed groundwater wells to one new water supply connection point.
9. **Return Flow Pumping Station (RFPS):** A RFPS with a firm capacity of 12 MGD will be constructed at the City of Waukesha's Clean Water Plant to convey highly treated effluent from that point to the Root River. The RFPS will be owned and operated by the City of Waukesha's Department of Public Works.
10. **Return Flow Pipeline and Appurtenances:** A 23.5-mile, 30 –inch Return Flow Pipeline will be constructed to convey highly treated effluent from the RFPS to the Root River.
11. **Return Flow Facilities at Root River:** Facilities including a reaeration structure, conveyance and an outfall structure will be constructed at the Root River outfall to provide a means for discharging highly treated effluent to the Root River in Franklin, WI.

5. Describe the project's purpose (including quantitative or qualitative details on public benefits the project(s) will achieve).

The purpose of the Program is to address the fact that Waukesha's water supply is contaminated with naturally occurring radium which is a critical public health issue. Waukesha is under a Consent Order with the State of Wisconsin to come into full compliance with state drinking water standards for radionuclide by September 1, 2023. In addition, the groundwater, drawn down by communities throughout southeast Wisconsin, is not recharging at an equivalent rate due to geological features. As such, continued use is not sustainable for the long term.

After a lengthy study and public engagement, the Great Lakes-St. Lawrence River Basin Water Resources Council (Compact Council) concluded that the Utility had no reasonable water supply alternative to a switch to Lake Michigan Water. It unanimously approved Waukesha's Application to source water from Lake Michigan and return an equivalent amount of flow to the

Great Lakes-St. Lawrence River Basin via the Root River. Under the Program, a new water supply system with a 100-year useful life is being planned, designed, constructed and commissioned.

Refer to Section 2 of Volume 1 of 5, the Application Summary, for the City of Waukesha Application for Lake Michigan Diversion with Return Flow included as Attachment B5-2 which contains further Program background and purpose. Refer to Attachment B5-3A for the Stipulation and Order for Judgment dated March 2009 and Attachment B5-3B for the Amended Stipulation and Order for Amended Judgment dated July 2017 for information regarding the Program intent and timeline.

As shown Section II of Attachment B5-1, the eight states of the Compact Council, with review and input from two Canadian provinces, reached the following conclusions about Waukesha's water project:

1. "[N]one of the evaluated alternatives were found to be reliable sources for a long-term, dependable, and sustainable public water supply and, therefore, the Applicant is without a reasonable water supply alternative" to Lake Michigan water.
2. "The Applicant's deep aquifer wells draw from an aquifer that is part of a regional aquifer system where withdrawals have exceeded the natural recharge rate."
3. "The Applicant's wells in the deep aquifer are in a confined aquifer which restricts recharge and contributes to groundwater decline."
4. "The Applicant's deep aquifer wells also have total combined radium . . . concentrations that are above the Safe Drinking Water Act standard."
5. Approval will "eliminate the introduction of radium into the environment."
6. "The groundwater depletion, along with the radium concentration issue, demonstrates that the deep aquifer is not a sustainable or safe source of water for the people served by the Applicant."
7. "The proposed Exception cannot be reasonably avoided through the efficient use and conservation of existing water supplies and the Exception will be implemented to incorporate environmentally sound and economically feasible water conservation measures to minimize water withdrawals."
8. "[A]pproximately 100% of the volume withdrawn from the Basin will be returned via flow through the Root River, a tributary of the Basin. This effectively results in no net loss of water volume to the Basin."
9. "The deep aquifer groundwater supply is hydrologically connected to waters of the Basin. Continued use of that aquifer draws groundwater away from the Basin" without being returned.
10. "Approving a diversion of Great Lakes water with return flow will result in a net increase of water in the Lake Michigan watershed."
11. The return flow will benefit a Basin tributary, the Root River . . . Increased flow will result in an improvement of the fishery and benefits to the Basin salmonid egg collection facility located downstream on the Root River."
12. Waukesha's "high quality" wastewater treatment includes "removal of chemical phosphorus, suspended solids and associated contaminants, as well as organic materials; tertiary filtration; and, ultraviolet light disinfection. The proposed phosphorus permit limits

are well below the water quality standard for the Root River and are on an order of magnitude lower than many existing dischargers to the Basin."

13. Waukesha must monitor the Root River "in order to adapt future return flow to minimize potential adverse impacts or maximize potential benefits."
14. "The Applicant must implement a comprehensive pharmaceutical and personal care products recycling program and continually use the best available methods to encourage the further reduction of such products into the wastewater as recommended by the Originating Party."
15. "The findings in this Final Decision are unique . . . and do not necessarily apply to any other applicant or application. The unique circumstances . . . include:"
    a. "The Applicant is under a court order to achieve complete compliance with all federal and state drinking water radionuclide standards by June 30, 2018."
    b. "Terminating use of the existing deep aquifer well water supply system will eliminate Waukesha's water utility system as a source of radium and the dispersion of radium into the environment."
    c. "The Applicant's wells in the deep aquifer are in a confined aquifer which restricts recharge and contributes to groundwater decline."
    d. "The deep aquifer groundwater supply is hydrologically connected to waters of the Basin. Continued use of that aquifer draws groundwater away from the Basin. The subsequent discharge of treated wastewater into the MRB surface waters results in loss of water from the Lake Michigan watershed."
    e. "An environmental analysis of MRB water supply alternatives predicts unavoidable significant impacts to hundreds of acres of wetlands or unavoidable significant impacts to three seepage lakes."
    f. "The Applicant's return flow management plan will return to the Lake Michigan watershed approximately 100% of the volume of water withdrawn."
    g. "The Applicant has separate storm and sanitary sewers, and the WWTP design and operation will prevent the spread of invasive species from the MRB and protect against return flow as the result of sewage overflow."
    h. "The Applicant's wastewater treatment plant includes removal of chemical phosphorus, suspended solids and associated contaminants, as well as organic materials; tertiary filtration; and, ultraviolet light disinfection."

6. Describe the location of the project(s). Include a project map, if available, and/or latitude and longitude details.

The Program's infrastructure is located in the Cities of Waukesha, New Berlin, and Muskego and the Town of Waukesha in Waukesha County, Wisconsin and the Cities of Milwaukee, Franklin, Greenfield and West Allis in Milwaukee County, Wisconsin. For a project map, refer to Figure ES-2, Pipeline and Return Flow Pipeline Routes on page ES-6 of Attachment B4-1.

7. County(s) project(s) will serve:

The City of Waukesha within Waukesha County, Wisconsin

8. Population served by the project(s):

72,489 (2017 Census estimate; census.gov) and additional areas of the Village of Pewaukee and the Town of Waukesha that are served by the Utility.

9. Total population served by system:

72,489 (2017 Census estimate; census.gov) and additional areas of the Village of Pewaukee and the Town of Waukesha that are served by the Utility.

10. Type of project delivery method (i.e., design-build, construction manager at-risk, design-bid-build) that is planned for this project(s):

Design-Bid-Build

11. Present the overall project schedule in the provided table. Provide the detailed project schedule(s) as an attachment.

	Start Date	End Date
Planning	10/24/2016	7/1/2018
Design	5/1/2018	11/1/2019
Permitting	10/25/2016	08/31/2023
Construction	1/1/2020	3/1/2022

The Program Schedule is included as Attachment B11-1.

Provide the estimated financial close date: 1/1/2020

12. Provide any analysis (i.e. preliminary engineering reports, feasibility studies, preliminary designs, siting studies, project plans, etc.) completed in support of the project(s). List referenced documents below and provide as attachments.

The following Program documents provide analysis include preliminary engineering reports, feasibility studies, and preliminary designs are included as Attachments:

B4-1: GWA_6-240 D1 Draft Preliminary Design Report, Program, July 2018
B4-1A: GWA_6-240 D1 Draft Preliminary Design Report – Appendix E – Draft Preliminary Design Report Drawings, Program, July 2018
B5-1: Waukesha – Final Decision of Compact Council, June 2016
B5-2: Application Summary, City of Waukesha Application for Lake Michigan Diversion with Return Flow, October 2013
B5 – 3A: Department of Justice Stipulation Order, March 2009
B5 – 3B: Amended Department of Justice Stipulation Order, July 2017

B12-1A: City of Waukesha Application for Lake Michigan Diversion with Return Flow - Volume 2 of 5, Water Supply Service Area Plan, October 2013

B12-1B: City of Waukesha Application for Lake Michigan Diversion with Return Flow - Volume 3 of 5, Water Conservation Plan, October 2013

B12-1C: City of Waukesha Application for Lake Michigan Diversion with Return Flow - Volume 4 of 5, Return Flow Plan, October 2013

B12-1D: City of Waukesha Application for Lake Michigan Diversion with Return Flow - Volume 5 of 5, Environment Report for Water Supply Alternatives, October 2013

B12-1E: City of Waukesha- Supplement No 2 - Supplemental Public Health and Environmental Information on Waukesha Water Supply Alternatives, April 2014

B12-1F: City of Waukesha – Supplement No 1 – Additional Information on Energy and Greenhouse Gas Emissions, February 2015

B12-2A: Future Water Supply Report, February 2002

B12-2B: City of Waukesha Water Supply Environmental Report, February 2012

B12-2C: Groundwater Flow Modeling Report, RJN Environmental Services, August 2013

B12-3B: Southeastern Wisconsin Regional Planning Commission (SEWRPC) Planning Report No. 52 A Regional Water Supply Plan for Southeast Wisconsin, Volume 1 of 2, SEWRPC, December 2010

B12-3C: SEWRPC Planning Report No. 52 A Regional Water Supply Plan for Southeast Wisconsin – Volume 2 of 2, SEWRPC, December 2010

B12-4: Public Service Commission of Wisconsin (PSC) Report on Water Conservation Programs, WWU, April 2018

B12-5: Waukesha Distribution System Modeling and Evaluation Technical Memoranda, March 2012.

B12-6: Draft Distribution System Hydraulic Model Calibration Technical Memorandum, Program, June 2018

B12-7: Draft Distribution System Improvements Technical Memorandum, June 2018

B12-8A: GWA_4-100 D1 Draft Route Study: Oak Creek, Program, January 2018

B12-8B: GWA_4-100 D1 Draft Route Study: Oak Creek -Appendix C-5 - ERIS Database Reports, Program, January 2018

B12-8C: GWA_4-100 D1 Draft Route Study: Oak Creek - Appendix E-3 - WDNR NHI Review, Program, January 2018

B12-8D: GWA_4-100 D1 Draft Route Study: Oak Creek - Appendix E-4 – USFWS IPaC Review, Program, January 2018

B12-8E: GWA_4-100 D1 Draft Route Study Oak Creek - Appendix I – Route Maps, Program, January 2018

B12-8F: GWA_4-100 D1 Draft Route Study: Oak Creek - Appendix J – Workshop and Meeting Summaries, Program, January 2018

B12-9A: GWA_4-100 D2 Draft Route Study: Milwaukee, Program, April 2018

B12-9B: GWA_4-100 D2 Draft Route Study: Milwaukee – Appendix B – 4-220 D4 Geotechnical Soil Analysis Technical Memorandum, Program, April 2018
B12-9C: GWA_4-100 D2 Draft Route Study: Milwaukee – Appendix C – 4-120 D2 Contaminated Materials Technical Memorandum, Program, April 2018
B12-9D: GWA_4-100 D2 Draft Route Study: Milwaukee – Appendix D – 4-130 D5 Wetland and Waterway Technical Memorandum, Program, April 2018
B12-9E: GWA_4-100 D2 Draft Route Study: Milwaukee – Appendix E – 4-130 D6 Endangered Resources Technical Memorandum, Program, April 2018
B12-9F: GWA_4-100 D2 Draft Route Study: Milwaukee – Appendix F – 4-140 D4 Cultural Resources Technical Memorandum, Program, April 2018
B12-9G: GWA_4-100 D2 Draft Route Study: Milwaukee – Appendix G – 4-170 D2 Agricultural Resources Technical Memorandum, Program, April 2018
B12-9H: GWA_4-100 D2 Draft Route Study: Milwaukee – Appendix H – 4-150 D2 Transportation Assessment Technical Memorandum, Program, April 2018
B12-9I: GWA_4-100 D2 Draft Route Study: Milwaukee – Appendix I – Route Maps, Program, April 2018

13. Present the findings of any alternatives analysis or business cases conducted, if available. Describe the project alternatives considered and the rationale (i.e., lowest capital cost, greater ease of operation, most reliable, fewest environmental impacts, etc.) for the selected alternative; this description should include the technical, managerial, financial, environmental, operational and local decision making rationale for the selected approach. Provide any referenced documents as attachments.

The Waukesha Water utility began this process to evaluate a new water supply by developing a Future Water Supply Study, Attachment B12-2A, in 2002. The City submitted a five-volume *Application for Lake Michigan Supply* to the Wisconsin Department of Natural Resources (WDNR) in May 2010, in accordance with the Great Lakes–St. Lawrence River Basin Water Resources Compact (Compact) and Wisconsin Statutes section 281.346.

Since then, there has been additional technical evaluation, extensive review of the materials, and requests from the WDNR for additional analyses. A revised *Application for a Lake Michigan Diversion with Return Flow* (Diversion Application) containing the technical information originally provided in May 2010 and discussion of the additional review and updated analysis that occurred after May 2010 was submitted to DNR in 2013. For the detailed alternatives analysis including alternatives considered and the rationale for the selected alternative, refer Section 4, Water Supply Alternatives Evaluations of Attachment B5-2.

Waukesha evaluated the fourteen (14) water supply source alternatives listed in Exhibit 4-1, Water Supply Sources Evaluated, on page 4-3 of Attachment B5-2, and the Preliminary Final EIS. Section 2of Attachment 17 - 1, respectively. Ten (10) of the fourteen (14) water supply source alternatives were eliminated for further evaluation as the sole water supply because of inadequate quantity, major environmental or regulatory issues and other factors as shown in

Exhibit 4-2, Water Supply Sources Not Selected, on page 4-3 of Attachment B5-2. Four additional alternatives were evaluated that were a combination of sources. A total of six (6) water supply alternatives were selected for detailed evaluation in the Diversion Application as shown in Exhibit 4-1, Water Supply Sources Evaluated, on page 4-3 of Attachment B5-2.

Conceptual designs of the infrastructure needed to implement each alternative were prepared to support technical analysis of each option and the preparation of opinions of probable construction costs. Design concepts were based on compliance with applicable municipal, state and federal laws. Groundwater modeling, streamflow analysis, and other technical studies were conducted on the water supply source alternatives. Details of these analyses are in Section 11.4 starting on page 11-7 of Attachment B12-1A, City of Waukesha Application for Lake Michigan Diversion with Return Flow, Volume 2 of 5 and Section 2 of Attachment B12-1D, City of Waukesha Application for Lake Michigan Diversion with Return Flow, Volume 5 of 5.

Based on the extensive technical analyses conducted over many years, Waukesha concluded that its current water supply source is unsustainable and a new Lake Michigan water supply adheres to proven public water supply selection principles. A Lake Michigan water supply with return flow will benefit the environment and public health as follows:

- Termination of deep aquifer pumping, which will help restore both the severely depleted groundwater levels and the natural groundwater flow regime towards the Great Lakes Basin instead of away from it.
- Adverse environmental impact on lakes, streams, wetlands, and springs from using groundwater will be eliminated.
- Approximately 100 percent of the water volume withdrawn will be returned to the Great Lakes. Recycling the water in an environmentally sustainable manner through a Great Lakes tributary will benefit aquatic habitat and fisheries during seasonal periods of low flow, and minimize the waste of water. Returning the water to a Lake Michigan tributary creates a positive precedent for using highly treated wastewater as a beneficial environmental resource.
- Radium in groundwater will no longer be pumped to the surface and will no longer be released to the environment as a byproduct of water treatment. The amount of salt released in the environment will also be reduced by up to 7 million pounds per year as water softeners may be optimized or may no longer be necessary on a wide scale basis.
- A Lake Michigan water supply source is sustainable, protective of the environment, and protective of public health. Switching from groundwater to a Lake Michigan supply results in more effective management of and improvement to the waters and water-dependent natural resources of the Great Lakes Basin.

In contrast, the other water supply source alternatives are not reasonable as they have greater adverse environmental impacts, are not sustainable, and are less protective of public health.

The Lake Michigan water supply source alternative provides a net environmental benefit for the waters and water dependent natural resources of the Mississippi River and Lake Michigan

Basins, is the most reliable and environmentally sustainable in the long term and provides the greatest public health protection.

14. If available, provide a copy of the system master plan or like document and list referenced document below.

Included as Attachments B12-2A, B12-2B, B12-2C, B12-3A, B12-3B and B12-3C are the following master planning documents:

- Future Water Supply Report, dated March 2002
- City of Waukesha Water Supply Environmental Report, dated February 2012
- Groundwater Flow Modeling Report, dated August 2013
- SEWRPC Planning Report No. 52 A Regional Water Supply Plan for South East Wisconsin – Volumes 1 and 2 and 20-year Water Supply Service Area Map, dated December 2010

15. Briefly discuss any other issues that may affect the development and financing of the project(s), such as community support, pending legislation, permitting, or litigation.

As described in Attachment B15-1, the WDNR is currently working closely with the city to obtain and review information that is required to issue required permits. While no permits have been issued for this project, the City of Waukesha has discussed the permitting with the DNR and together we have worked through all of the significant technical details. At this point in the process, nothing has arisen to change the WDNR view that it is approvable and permits will be issued. Waukesha is committed to meeting the schedule set forth in their Stipulation Order and has been meeting regularly with the Regulators and Community Stakeholders with influence on the Program to identify any risks to the Program.

A critical permit is the Type 2 Application for Authority to Construct, otherwise known as a Certificate of Authority (CA) that is concurrently reviewed by the Public Service Commission of Wisconsin (PSC), WDNR and the United States Army Corps of Engineers (USACE). Part of the process for obtaining the CA includes technical and public hearings, during which a case could be brought against the Program. During Waukesha's continuous engagement with Regulators and Community Stakeholders, no parties that would contest the CA have been identified.

Another critical permit to the Program is the WPDES permit. As described in the DNR letter, Attachment 15-1, Waukesha has been working with the Regulators to make sure that the significant technical details are agreed to and that there is time in the Program schedule to accommodate a contested case hearing.

Additionally, there is no pending legislation that will affect the development and financing of the Program. The Regulators expect that the CA will be issued and Waukesha will be able to move forward with the Program. Waukesha will continue to meet with the Regulators and Community Stakeholders to understand requirements of the various permits and funding schedules and also to continue to identify any risks to the Program and plans to mitigate those risks.

16. Describe the authorizing actions (e.g., local vote, board vote, ordinance) that would need to occur in order to enter into a loan agreement with the WIFIA program.

The single authorizing action needed to enter into a loan agreement with the WIFIA Program is for the City of Waukesha Common Council to vote to authorize the Waukesha Water Utility to enter into the agreement with the WIFIA program. As preceding steps, but not authorizing actions, the Waukesha Water Commission and the Waukesha Finance Committee will review and recommend that the Waukesha Common Council vote in favor of authorizing the City of Waukesha Water Utility to enter into the agreement.

17. Present the environmental review plan and status of such for the project(s). Describe the status of any additional permits and approvals that the project(s) may require.

In conjunction with Waukesha's Diversion Application, WDNR published a Preliminary Final Environmental Impact Statement (EIS) in January 2016. This document is included as Attachment B17-1.

Under the Program, updated environmental impact information associated with the Program Elements and preferred routes were compiled into an Environment Impact Report (EIR) and submitted to WDNR in March 2018. The draft Environmental Impact Report is included as Attachment B17-2. WDNR will utilize the EIR to complete and issue a Final EIS for the Program. The Final EIS is anticipated to be completed in September 2018.

Due to the size and scale of the Program, over 80 permits will be obtained from local, State and Federal regulatory agencies in order to bid, award and construct Waukesha's new water supply. The list of permits to be obtained under the Program is included in Attachment B17-3, List of Program Permits.

18. If applicable, describe community outreach efforts conducted to date and planned for the project(s).

The City of Waukesha and the Waukesha Water Commission had many open meetings during their analyses and decision-making on the water supply. A summary of more than 100 public meetings between 2006 and the submission of a revised application to the WDNR is included in Appendix G – Public Participation Process Documentation in Volume 2 of the Diversion Application (Attachment B12-1A). Those include public meetings, public hearings, and public presentations in individual aldermanic districts. Additional outreach included updates on the Utility's website, press interviews, press releases, opinion columns, and meetings and correspondence with stakeholder groups.

Community outreach efforts during WDNR's review of the Diversion Application included:

- Three public scoping meetings were held on July 26, 27, and 28 in 2011 during which 102 public scoping comments were received.

- Public comments were invited on the draft environmental impact statement (EIS) between June 25 and August 28, 2015 and 3,634 written comments were received from individuals and groups.
- Comments were received at three public hearings on August 17 and 18, 2015. Of the 404 people who registered at the hearings, 128 provided oral testimony. The oral testimony is summarized in Appendix A of WDNR's Preliminary Final Environmental Impact Statement (EIS) provided as Attachment B17-1.
- Two sets of public hearings and two public comment periods were held prior to submitting the Diversion Application to the Compact Council in January 2016.

The following additional community outreach was conducted by the Compact Council:

- A public comment period was held from January 12, 2016, to March 14, 2016.
- The U.S. Tribes and Canadian First Nations of the Application were notified and their comments were requested.
- A public meeting and hearing were held on February 18, 2016.
- Over 11,000 public comments were received.

The Compact Council created a website (www.waukeshadiversion.org) to inform the public of meetings, documents received, and findings of the Compact Council. The website served as a repository of all information received by the Compact Council regarding the Diversion Application. In September 2017, the www.waukeshadiversion.org website was transferred to the Regional Body website: http://www.glslregionalbody.org/Resolutions.aspx#Waukesha.

Since the approval of the Diversion Application, the Utility continues to engage the public about the Program and meet with stakeholder groups to educate them regarding the Program, answer questions, and furnish them presentations. The following community outreach efforts have occurred:

- Focus group discussions comprised of community members of the Cities of Waukesha (City), Franklin (Franklin), Muskego (Muskego), New Berlin (New Berlin), Racine (Racine), and Milwaukee (Milwaukee) were held in December 2016.
- Stakeholder interviews with residents of Waukesha, and the surrounding communities of New Berlin, Muskego, Franklin, City of Oak Creek (Oak Creek), and Racine were held in November and December 2016, and January and February 2017.
- Meetings and presentations with community leaders, trade groups, government entities, and landlords as well as a series of open houses in 2017 and 2018 in Waukesha, Franklin, Muskego, New Berlin, Greenfield, West Allis and Milwaukee.
- Information materials in the form of comment cards, pocket cards, and myth versus fact cards that are used at meetings, presentations and by field investigation crews.
- A Program website (http://greatwateralliance.com/) was developed and is maintained to keep the public informed about Program activities. This website has been in use since 2017 and will continue to be used as the Program progresses.
- Social media platforms, Facebook (https://b-m.facebook.com/GWASocial/) and Twitter (https://twitter.com/gwa_social?lang=en)
- A hotline (262-409-4444) which is monitored daily; callers are responded to within 24 hours.

- A quarterly E-Newsletter is sent to the residents who have signed up to receive the E-Newsletter.
- Direct mailings to residents and businesses within the City of Waukesha as well as those along the route alternatives prior to the field investigations for the Water Supply and Return Flow Pipelines.

The Utility continues to respond to requests for interviews, issue press releases, and author opinion columns for publication in Wisconsin and other Great Lakes states and provinces. Examples of media stories, opinion columns, and press releases can be found at the following links:

- http://www.waukesha-water.com/pa.html
- http://www.waukesha-water.com/pr.html
- http://greatwateralliance.com/press-room

The Utility continues to coordinate with local municipalities and officials to keep the public informed about Program developments and potential construction impacts to businesses and residents.

19. Indicate if the project is located in, close to, or could impact the 100-year floodplain.

☒ Located in 100-year floodplain
☒ Close to 100-year floodplain
☒ Could impact 100-year floodplain
☐ None of the Above

This Program has 36 miles of pipeline and facilities located on several different sites; therefore, all of the scenarios listed above apply.

Section C: Project Operations and Maintenance Plan

1. Provide the estimated useful life of the project(s) and describe the underlying assumptions. In determining the useful life of the project(s), please consider the useful economic life of the asset(s) to be financed.

The purpose of the Program is to plan, design, construct, and commission infrastructure with a 100-year useful life necessary to transition Waukesha's water supply.

The water supply and return flow pipelines are being designed with a useful life of 100 years; the PSC's Water Utility Reference Manual for Depreciation Rates (Manual) uses 85 to 100 years. In reality, the Utility has some pipelines that have been in service for just over 100 years. In addition, the manual gives the following useful life ranges:

- 85 to 100 years for valves
- 55 to 75 years for hydrants
- 30 to 40 years for pumping stations structures
- 15 to 20 years for chemical feed equipment
- 20 to 30 years for pumps
- 50 to 65 years for reservoirs

In many cases, the Utility has seen assets exceed the expectation noted above. With good sound design, proper construction, and regular maintenance, the Utility has existing pump station structures with an age of over 80 years. The noted life expectancy for chemical feed equipment and pumps are realistic and match with the Utility's experiences; however, with proper design of the aforementioned structures, this equipment can be easily replaced as part of a regular scheduled maintenance plan without damage or adverse effects to the structure. As for reservoirs, the Utility's oldest active reservoir was constructed in 1956 and during the last inspection, it was only in need of minor cosmetic repairs after 62 years.

2. Provide the project(s)'s operation and maintenance plan, including sources of revenue to finance those activities, any performance guarantees, and major maintenance reserves. A preliminary or draft plan is acceptable.

The Operation and Maintenance Planning Report which will outline the process of operation and thus the regular routine maintenance for the equipment associated with the Program has not yet begun. Attachment C2-1, Draft Preliminary Design Report – Appendix D, outlines the costs that are associated with regular routing maintenance and life expectancy replacements based on the 30% design and our experience with the staff levels needed to complete the O&M activities.

As WWU will own, operate and maintain the equipment, there will not be performance guarantees.

The operations and maintenance plan will be funded by water rates that are applied for by the Utility and approved by the PSC of Wisconsin.

3. Describe any contractual arrangements that may impact the operation of the project(s).

The City of Milwaukee will provide the new water supply to Waukesha. In entering into a Water Service Agreement with the City of Milwaukee, Waukesha will become Milwaukee's largest wholesale customer. The terms of this contractual arrangements is an initial period of 40 years from the effective dates and shall automatically renew for subsequent ten year periods. The flow rates, pressures and quality parameters of the supply from Milwaukee are set forth in that agreement, included as Attachment E9-2A and E9-2B.

Section D: Financing Plan

1. Estimated total eligible project costs (in dollars):

The estimated total eligible costs of the project are $286,218,000. Attachment D1-1 provides a schedule of the eligible projects costs by major activity.

2. Requested amount of the WIFIA loan (in dollars):

The extent of WIFIA assistance being requested is approximately 38.6% of eligible project costs or $110,454,000.

3. Provide a sources and uses of funds table for the construction period(s), including the proposed WIFIA assistance. Note any ineligible project costs. More information about eligible costs is available in the WIFIA program handbook.

Sources Category	Estimated Dollar Value
1. WIFIA Loan	$110,454,000
2. Revenue Bonds	$0
3. SRF Loan	$163,100,000
4. Borrower Cash	$0
5. Other (please specify) Payable to City – General Obligation Debt	$12,664,000
6. Other (please specify) Click or tap here to enter text.	$0
TOTAL SOURCES	$286,218,000
Uses Category	Estimated Cost
1. Construction	$230,218,000
2. Design	$41,100,000
3. Planning	$14,900,000
4. Land Acquisition	$0
5. Other Capital Costs	$0
6. Contingency	$0
7. Total Capital Costs	$286,218,000
8. Other (please specify) Click or tap here to enter text.	$0
8. Other (please specify) Click or tap here to enter text.	$0
9. Ineligible Costs (if applicable)	$0
TOTAL USES	$286,218,000

4. Provide a narrative describing the project(s) plan of finance. This should include a discussion of the proposed financial structure and any existing ratings on the security pledged for repayment of the WIFIA loan (if available) or a description of how the senior debt obligations will garner an investment-grade rating(s). Note availability and credit terms of other project funding sources. Include any preliminary revenue projections and explain underlying assumptions.

If the prospective borrower is a pool of eligible borrowers and projects, discuss the existing ratings and repayment schedules of the underlying borrowers and attach supporting documentation as available. Confirm that there will be a single revenue pledge securing the WIFIA debt.

The financial structure of the project includes 38.6%, or $110.4 million subordinate WIFIA financing with a proposed term of 35 years. The remainder of the project funding will come from 20-year Safe Drinking Water Loan Program financing (13.1% or $37.5 million), 30-year Clean Water Fund Program financing (43.9% or $125.6 million) and general obligation debt financing (4.4% or $12.7 million).

When the City of Waukesha Water Utility (Utility) last issued revenue bonds in 2008, it was given a rating of Aa3 from Moody's. While the Utility hasn't issued debt on the open market in a decade, it should be noted that the City of Waukesha (City) issued general obligation bonds and sewer revenue bonds in 2018, with each being assigned a rating of Aa2 by Moody's.

The Utility's operating revenues are expected to grow 11% annually, on average, over the next 9 years. These revenues are projected to pay all WIFIA, Safe Drinking Water Loan Program and general obligation debt service related to this project. The Clean Water Fund Program debt service is projected to be paid solely by the City's return flow utility rates. Please see the attached pro forma financials (Attachment D4-1) for additional details.

5. Describe the proposed credit terms of the WIFIA assistance including the security pledge, the lien position, maturity date (term), and amortization structure (e.g. straight-line or sculpted). State whether the WIFIA loan will be issued on a senior or subordinate lien.

The Utility is requesting that WIFIA be subject to terms and conditions in the existing indentures. WIFIA would be issued as a subordinate lien bond secured by the Utility's revenues, with an annual debt coverage requirement of net revenues equaling 110% of each subsequent year's revenue debt service. Once the senior debt obligations have been met, net operating revenue cash flow would be used to satisfy the WIFIA and other subordinate debt's covenants. The Utility's pro-forma financials can be found in **Attachment D4-1**.

WIFIA disbursements would occur on a monthly or quarterly basis during the construction period. WIFIA repayment is sculpted around the Utility's rate schedule and debt service schedule of existing and other planned debt issues for this project. Substantial completion of

the project is expected in late 2022. After a 5-year deferral period as allowed by the program, debt service repayments increase each year from 2028 to 2042. From that point on, balanced amortization remains through maturity in 2057. Details of the planned debt repayment schedule can be found in the attached Debt Summary (**Attachment D5-1**).

6. Describe the prospective borrower's financial condition.

The Utility is in a strong financial condition with strong cash reserves and stable operating revenues. As shown in the attached pro-forma financials, utility revenues satisfy operating costs, capital expenditures and debt service needs, with a minimum debt service coverage of 1.5x over the life of the WIFIA loan. The projections also assume that all needed reserves are fully funded including emergency capital reserves and emergency operating reserves.

Rates are projected to increase 10%-20% in 6 of the next 9 years to achieve the projected revenues on the pro-forma financials. Rate setting for municipally-owned water utilities is ultimately approved by the State of Wisconsin PSC (PSC); however, long-term projections and rate setting have been topics of consistent discussion between the Utility and the PSC during the past couple of years and will continue into the future to assure that operating expenses are covered and required debt covenants are satisfied for years to come. Water conservation has been a priority for the Utility over the past decade. Impacts of this continuing program were also considered when producing the revenue projections.

7. Provide the year-end audited financial statement for the past three years, as available as an attachment. Provide the financial statement filenames in the textbox.

Three years of audited financial statements are attached as follows:

- Waukesha Water Utility Audited Financial Statement – 2015 (Attachment D7-1)
- Waukesha Water Utility Audited Financial Statement – 2016 (Attachment D7-2)
- Waukesha Water Utility Audited Financial Statement – 2017 (Attachment D7-3)

8. Attach a financial pro forma which presents key revenue, expense, and debt repayment assumptions for the revenue pledged to repay the WIFIA loan through the final maturity of the proposed WIFIA debt, including up to three years of historical data, as available. The pro forma should be provided in an editable Microsoft Excel format, not in PDF or "values" format. The pro forma should include at a minimum the following:

a. Sources of revenue
b. Operations and maintenance expenses
c. Dedicated source(s) of repayment
d. Capital expenditures
e. Debt service payments and reserve transfers, broken down by funding source and including the WIFIA credit assistance
f. Projected debt service coverage ratios for total existing debt and the WIFIA debt
g. The project's or system's debt balances broken down by funding sources

h. Equity distributions, if applicable

If available, include sensitivity projections for pessimistic, base and optimistic cases. A sample financial pro forma is available at https://www.epa.gov/wifia/wifia-application-materials-and-resources. Provide the financial pro forma filename in the textbox.

Please refer to **Attachment D1-1** for the project cost summary. **Attachment D4-1** includes three years of historical financial data, financial projections for the next ten years and the last year of maturity for the WIFIA loan. The projections assume that the water customer base remains stable and the Utility's water conservation program continues through 2027. Also, the Utility's commitment to its infrastructure by replacing 1% of water mains each year is included in the projections.

The projections also illustrate the Utility's strong financial position. As can be seen by its ratios, the Utility projects strong liquidity to cover current and future operating expenses, as well as, all debt associated with the project, including any WIFIA loans. It should also be noted the strong savings that WIFIA loans would create for the Utility's rate payers. **Attachment D8-1** illustrates a benefit of $38.5 million to the rate payers versus the use of revenue bonds.

9. Has the prospective borrower consulted with the applicable State Revolving Fund (SRF) program to procure SRF funding? If so, indicate whether it is applying for the SRF funding and where it is in the application process.

Yes, the Utility has been in contact with the State of Wisconsin SRF program. An Intent to Apply (ITA) has been submitted for the entire project (Safe Drinking Water Fund and Clean Water Fund). The overall project has received preliminary scores (PERF) on both the water supply and return flow portions.

The Utility anticipates that SRF financing will be received starting in 2019.

Section E: Selection Criteria

For each selection criterion, provide a response explaining the extent to which the project seeking the WIFIA loan relates to the criterion. When applicable, reference attachments. Detailed definitions for each selection criteria are provided in the WIFIA program handbook available at www.epa.gov/wifia.

1. **National or regional significance:** Describe the extent to which the project is nationally or regionally significant, with respect to the generation of economic and public benefits, such as (1) the reduction of flood risk; (2) the improvement of water quality and quantity, including aquifer recharge; (3) the protection of drinking water, including source water protection; and (4) the support of international commerce. [15 POINTS]

   The Program is of such significance to the region that we have received several letters of support, see the following attachments:

   - Attachment E1-1 from Senator Baldwin
   - Attachment E1-2 from Senator Johnson,
   - Attachment E1-3 from Congressman Sensenbrenner
   - Attachment B15-1 from the Wisconsin DNR,
   - Attachment E1-4 from State Senator Kapenga and State Representatives Allen and Neylon
   - Attachment E1-5 from Waukesha County Executive Farrow
   - Attachment E1-6 from Waukesha County Supervisor Crowley
   - Attachment E1-7 from Waukesha County Supervisor Nelson
   - Attachment E1-8 from Waukesha County Supervisor Paulson
   - AttachementE1-9 from the Waukesha County Business Alliance and Metropolitan Milwaukee Association of Commerce

   The extent to which the project is nationally and regionally significant is detailed below:

   1. Waukesha is the first community in a straddling county to obtain an approved water diversion since the Compact was signed into law. The Compact procedures and its strict criteria were agreed to by eight Great Lakes states and two Canadian provinces, and adopted as U.S. federal law. Waukesha's application, and the thorough international review by those states and provinces, demonstrates that international cooperation and the Compact law both work.
   2. Waukesha's transition from a groundwater source to a surface water source will also be an example for other communities on how to switch to a new water source while protecting public health.
   3. This Program is regionally significant because:
      a. It provides a sustainable water supply for the hub of Waukesha County.
      b. It generates jobs for Waukesha and Southeastern Wisconsin.
      c. It creates a new revenue stream for the City of Milwaukee which may be used to address their lead service replacement issues.

   d. It helps preserve the drinking water source for many southeastern Wisconsin communities by discontinuing the largest Wisconsin withdrawal from the St. Peter Sandstone aquifer and helping future recharge.
   e. It improves the health of the ecosystems by reducing the amount of radium and chlorides released into the environment and by reducing the negative impacts on area wetlands, lakes and streams caused by the drawdown in the aquifer.
4. The Program also uses One Water principles to return water to the source via a Lake Michigan tributary, improving the fishery and regional angling opportunities by adding needed additional flow to the river with highly treated water after use by Waukesha.
5. Examples of economic and public benefits generated by the Program include:
   a. Providing the residents, businesses and government of the City of Waukesha a certain and sustainable future anchored by sustainable water supply. This certainty is needed for the long-term planning required of all municipalities to provide economic stability to their communities both locally and regionally.
   b. Creating jobs in the City of Waukesha and across Southeast Wisconsin. It is anticipated that the $286M Program will generate 4,500 construction jobs through 2023 when the new water supply is fully transitioned.
   c. Creating a new revenue stream for Milwaukee Water Works, which allows them to maximize their return on investment in their water treatment and distribution system. In providing Waukesha with potable water, Milwaukee Water Works will utilize available capacity in their existing treatment and distribution system. The operation, maintenance and debt service costs encumbered by Milwaukee's retail and wholesale customers for underutilized system capacity will be shared across a greater number of users, thereby reducing customers' collective cost burden and helping Milwaukee address lead service issues.
6. Termination of pumping from the St. Peter Sandstone aquifer will help restore both the severely depleted groundwater levels and the natural groundwater flow regime towards the Great Lakes Basin instead of away from it, benefitting communities in both Wisconsin and Illinois.
7. Increasing flow to the Root River will benefit the fishery operation which is described further in Section 2.3.2 of Attachment B12-1C, Volume 4 of 5 of Waukesha's Diversion Application and Attachment E2-1, a memorandum from the Wisconsin DNR on the benefits of the Program's return flow to the salmon in the Root River.
8. Radium in groundwater will no longer be pumped to the surface and will no longer be released to the environment as a byproduct of water treatment. The amount of salt released into the environment will also be reduced as the amount of salt used for water softening will be reduced by up to 7 million pounds per year.

2. **New or innovative approaches:** Describe the extent to which the project uses new or innovative approaches. [5 POINTS]

The Compact requires the return of all borrowed water, less consumptive use, to the Great Lakes Basin. This Program is taking the new and innovative approach of setting a precedent to exceed the Compact's requirement by returning 100% of the borrowed water volume to the Great Lakes Basin. This approach sets a positive and protective precedent for having no impact on Great Lakes water levels.

The water will be returned to the Great Lakes via the Root River, a Lake Michigan tributary. This innovative example of One Water principles uses highly treated wastewater as an environmental resource, not as waste to dispose of. It will enhance the flow in the river which, like many urban waterways, has been reported since 1996 to be too low. The increased flow will improve water quality in the river for parameters like phosphorus and will improve fish passage during dry periods, including spawning. For more details about these benefits refer to Attachment E2-1, which is a memorandum from the Wisconsin DNR on the benefits of the Program's return flow to the salmon in the Root River and Section 2.3.2 of Attachment B12-1C, Volume 4 of 5 of Waukesha's Diversion Application.

Another innovative approach that is being taken as part of the Program is maintaining two outfalls at the Clean Water Plant. This will allow the operations staff some flexibility in how they operate during wet weather events so as to lessen the impact to both receiving waters by distributing the flow between the two rivers.

Waukesha has also been a leader in its water conservation efforts, including the state's first conservation rates and first toilet rebates. It offers rain barrel and showerhead rebates, provides conservation education in grade schools and works individually with business customers to help reduce their water use.

The Utility has designed and constructed a pipe loop testing apparatus that will be used to predict the water quality of the new system to avoid water quality issues during the transition. This apparatus has been designed and built by the Utility in such a way that it can be used by other communities in the future to study and predict water supply transition conditions.

3. **Protection against extreme weather events:** Describe the extent to which the project (1) protects against extreme weather events, such as floods or hurricanes, or (2) helps maintain or protect the environment. [5 POINTS]

As stewards of the environment, the Utility is always looking for ways to improve the health of the environment while providing water to their customers. To that end, the Program will more greatly protect the environment by eliminating Waukesha's reliance on an unsustainable and contaminated ground water supply. The Program eliminates the introduction of radioactive materials to municipal water and wastewater systems that would need to be removed and disposed of in a safe manner. Additionally, the amount of salt released into the environment

will be reduced as the amount of salt used for water softening will be reduced by up to 7 million pounds per year.

Discontinuation of pumping from the St. Peter Sandstone aquifer will help the severely depleted groundwater levels rebound and encourage the natural groundwater flow regime towards the Great Lakes Basin instead of away from it benefitting communities in both Wisconsin and Illinois. Adverse environmental impact on lakes, streams, wetlands, springs, and hundreds of acres of area wetlands from using groundwater will be prevented and the health of the environment will be improved.

Waukesha is also maintaining two outfalls at the Clean Water Plant. This will allow the operations staff some flexibility in how they operate during wet weather events so as to lessen the impact to both receiving waters by distributing the flow between the two rivers.

4. **Serves energy exploration or production areas:** Describe the extent to which a project serves regions with significant energy exploration, development, or production areas. [5 POINTS]

   While the Program isn't serving a region with significant energy exploration, development or production, it will reduce Waukesha's energy consumption and carbon footprint through the abandonment of existing, inefficient facilities and the design and construction of new, highly efficient facilities, thereby making available energy resources for the region. The improvements include:

   - Eliminating the use of multiple high-head well pumps,
   - Use of new higher-efficiency pumps,
   - Use of newer high-efficiency electrical equipment,
   - Maximize pumping during electrical utility off-peak power periods to minimize total system electrical loads, and
   - Reducing driving distances for operators between sites they have to maintain.
   - Investigating the use of microturbines for energy recovery in the Return Flow pipeline.

5. **Serves regions with water resource challenges:** Describe the extent to which a project serves regions with significant water resource challenges, including the need to address (1) water quality concerns in areas of regional, national, or international significance; (2) water quantity concerns related to groundwater, surface water, or other resources; (3) significant flood risk; (4) water resource challenges identified in existing regional, state, or multistate agreements; and (5) water resources with exceptional recreational value or ecological importance. [10 POINTS]

   The St. Peter Sandstone aquifer spans north-south from Minnesota to Arkansas and east-west from Illinois into Nebraska and South Dakota. Water levels in that aquifer in southeastern Wisconsin have declined by hundreds of feet, due in part to a shale confining layer that restricts recharge by rain and snowmelt. Because this drawdown is greater than 150 feet, Waukesha County and the counties surrounding it were designated by the State of Wisconsin as a groundwater management area in 2003 – one of only two such areas in the state.

The City of Waukesha currently has the largest withdrawal from that aquifer. Its Program will end that withdrawal and switch to using and returning a sustainable supply of Lake Michigan water instead.

Ending that withdrawal will help the sandstone aquifer recover, benefiting the other southeastern Wisconsin communities that use it as their drinking water supply. In addition, the recovery of the aquifer and the prevention of the need to drill additional wells in shallow aquifers will benefit area lakes, streams, spring, and hundreds of acres of wetlands. It will also end the unintentional diversion of 500 million gallons per year form the Great Lakes groundwater basin into the Mississippi River groundwater basin due to hydrological interconnections. Refer to the John Jansen memorandum on aquifer levels dated November 25, 2015 in Attachment B12-1D.

The Program will address the water resource challenges across regional multistate agreements; by being the first for a community in a county straddling the Great Lakes-St. Lawrence River Basin to access Great Lakes water through the Compact. Successful implementation of the Program will set industry precedents for solving water quality and water scarcity challenges for at-risk water supplies in other Great Lakes Communities eligible to receive Great Lakes water through the Compact.

The flow in the Root River, like many urban waterways, has been reported since 1996 to be too low. The Program will return highly treated wastewater to the Great Lakes via the Root River, a Lake Michigan tributary. The increased flow in the river will improve water quality in the river for parameters like phosphorus and will improve fish passage during dry periods, including spawning. For more details about these benefits refer to Attachment E2-1, which is a memorandum from the Wisconsin DNR on the benefits of the Program's return flow to the salmon in the Root River and Section 2.3.2 of Attachment B12-1C, Volume 4 of 5 of Waukesha's Diversion Application.

Refer to Section 7 of Attachment B12-1D, City of Waukesha Application for Lake Michigan Diversion with Return Flow, Volume 5 of 5 and Attachment B12-1D, John Jansen Memorandum on Aquifer Levels, for further details.

6. **Addresses identified priorities:** Describe the extent to which the project addresses identified municipal, state, or regional priorities. [10 POINTS]

This Program implements the recommendation of the Regional Water Supply plan which was developed to manage the regional resources given the magnitude of the drawdown in the aquifer.

This Program also meets the strict criteria of the Great Lakes Compact for a community in a straddling county that is in need of a new water supply as shown in Section I of Attachment B5-1, Waukesha's Final Decision. The thorough and cooperative review by states and provinces of

the United States and Canada showed that the Great Lakes-St. Lawrence River Basin Compact (Compact) is a workable and effective agreement for protecting the shared resources of the Great Lakes.

The Compact bans diversions of Great Lakes water to protect the Great Lakes Basin water cycle. The two exceptions are for Straddling Communities and, if they have no reasonable alternative, Communities in Straddling Counties. In June 2016, Waukesha's Diversion Application was unanimously approved by Regional Body's eight States and supported by the two Canadian provinces bordering the Great Lakes. Waukesha's Program is the first diversion by a community in a straddling county to be considered since the Compact was signed into law in 2008.

This conclusion is documented in Attachments B12-2A, B12-3B and B12-3C, the Future Water Supply Report dated March 2002, and the SEWRPC Planning Report No. 52 A Regional Water Supply Plan for South Eastern Wisconsin – Volumes 1 and 2 dated December 2010.

In 2003, the State of Wisconsin adopted legislation that identified two area of the state that have severe groundwater drawdowns of more than 150 feet, designating them as Groundwater Management Areas. The area surrounding Waukesha is one of those areas. Waukesha is the largest user of the depleted aquifer. Ending its use of groundwater will help meet the State's goal of recovery, 2003 Wisconsin Act 310.

Waukesha's highly treated return flow to Lake Michigan will be via the Root River. Flow augmentation for the Root River has been identified as a need by the regional planners at SEWRPC since 1966 and reaffirmed in 1979. Waukesha's return flow will increase the flow in the river and benefit the fishery, including during critical spawning periods. This flow augmentation will also benefit the WDNR's Root River Steelhead Facility. This facility collects steelhead, brown trout, Coho salmon and Chinook salmon eggs that help support regional fisheries and angling opportunities. The facility would benefit from the increased flow provided under the Program because more fish will be able to reach the facility, resulting in increased egg collection, described further in Section 3.1.3 in Attachment B12-1C, Volume 4 of 5 of the Diversion Application.

According to a 2012 WDNR memo, Attachment E2-1, "These low flows have a very negative impact on the fishery. Understandably, this also results in a significant decrease in the department's ability to collect adequate supplies of eggs for our hatcheries. Further, the angling opportunities are greatly diminished downstream of the Horlick Dam. In short, no water means few fish, inadequate or hard to obtain egg collection and a decreased number of anglers. As a result we believe that increasing the total stream flow by about 15 cfs (the average return flow from Waukesha) would be beneficial to our fisheries program goals for the Root River and for Lake Michigan."

The Program addresses regional priorities to a significant level which has resulted in great support throughout the region. Please see the following attachments for letters of support:

- Attachment E1-1 from Senator Baldwin
- Attachment E1-2 from Senator Johnson,

- Attachment E1-3 from Congressman Sensenbrenner
- Attachment B15-1 from the Wisconsin DNR,
- Attachment E1-4 from State Senator Kapenga and State Representatives Allen and Neylon
- Attachment E1-5 from Waukesha County Executive Farrow
- Attachment E1-6 from Waukesha County Supervisor Crowley
- Attachment E1-7 from Waukesha County Supervisor Nelson
- Attachment E1-8 from Waukesha County Supervisor Paulson
- AttachementE1-9 from the Waukesha County Business Alliance and Metropolitan Milwaukee Association of Commerce

7. **Repair, rehabilitation, or replacement:** Describe the extent to which the project addresses needs for repair, rehabilitation or replacement of a treatment works, community water system, or aging water distribution or wastewater collection system. [20 POINTS]

The Utility is implementing a Program to address its water supply needs by transitioning Waukesha's water supply from groundwater to Lake Michigan water. This Program will transition Waukesha's water supply from a depleted, contaminated supply that would cost millions to treat and is unsustainable to a Great Lakes water supply that meets all federal and state standards and is sustainable because it returns the water back to the supply's watershed. The aquifer which Waukesha currently uses is severely drawn down and contains naturally-occurring radium in quantities that exceed state and federal drinking water standards. The purpose of the Program is to plan, design, construct, and commission infrastructure with a 100-year useful life necessary to transition Waukesha's water supply. New facilities and equipment will be constructed that will replace infrastructure that is maintenance intensive and nearing the end of its useful life, and that has had multiple pump failures. New equipment will be more energy efficient, the water supply and return flow pipelines are being designed for a service life in excess of 50 years, and the Utility will eliminate all known lead pipe and fittings within its distribution system.

8. **Economically stressed communities:** Describe the extent to which the project serves economically stressed communities, or pockets of economically stressed rate payers within otherwise non-economically stressed communities. [10 POINTS]

Waukesha has no reasonable water supply alternative to the Program to switch to a Great Lakes water supply, but the $286 million program will be a burden for ratepayers in a city of approximately 72,000 people. The greatest impact will be on those with fixed or low incomes. The City of Waukesha residents include economically stressed rate payers comprised of elderly individuals that are on fixed incomes and low-income families. The US Census website (census.gov, June 5, 2018) lists the median household income in Waukesha at $59,866 in 2016 dollars based on data from 2012-2016 with approximately 11% if the population living in poverty and approximately 12% of the population over 65 years old. By comparison, Waukesha County has a median household income of $78,268 in 2016 dollars based on data from 2012-2016 with approximately 5% of the population living in poverty and approximately 17% of the population

over 65 years old (census.gov, June 5, 2018). Lastly, 30% percent of the students in Waukesha Public Schools are economically disadvantaged as stated in Wisconsin's Department of Instruction statistics.

The selection of the City of Milwaukee as Waukesha's water supplier provided Waukesha the opportunity to reduce the Program capital costs and annual revenue requirements. In addition, as described in Section D of this Letter of Intent, Waukesha's financial plan is structured to spread capital costs evenly across the construction schedule to achieve regular and predictable rate increases.

In entering into a Water Service Agreement with the City of Milwaukee, Waukesha will become Milwaukee Water Works' largest wholesale customer, providing millions of dollars per year in new revenue. The increased system demand for Milwaukee provides Milwaukee rate payers a return on their investment by maximizing the use of existing treatment and transmission system capacity allowing Milwaukee Water Works to reinvest in their system while minimizing rate increases. This benefits Milwaukee's economically stressed rate payers where the median household income is $36,801 in 2016 dollars based on data from 2012-2016 with approximately 28% if the population living in poverty (census.gov, June 5, 2018).

9. **Reduces exposure to lead:** Describe the extent to which the project reduces exposure to lead in the nation's drinking water systems or ensures continuous compliance with contaminant limits. [20 POINTS]

The Program will reduce exposure to lead in the drinking water system and continue operating Waukesha's water system within compliance of contaminant limits by:

- Conducting a pipe loop test to study the water quality impacts the transition from ground water to surface water may have on the existing water system. The study will evaluate the impacts the transition from sodium hypochlorite to chloramines for disinfection and sodium silicates to orthophosphates for corrosion protection may have and to protect against exposure to lead in the distribution system and in premise piping beyond the extent of distribution system. A Pipe Loop Test Plan has been approved by the Wisconsin Department of Natural Resources (WDNR) and testing is underway. The testing will be done over a 12 month period and the results will be utilized to develop a water supply transition plan that will preclude negative water quality impacts.
- Through its ongoing distribution system improvements, the Waukesha Water Utility will eliminate all known lead pipe and fittings within its distribution system.
- A component of the Water Service Agreement between the Cities of Milwaukee and Waukesha is the payment by Waukesha to Milwaukee of a $2.5 million infrastructure fee. Milwaukee's Mayor Tom Barrett, in his State of the City address on February 26, 2018, stated that the infrastructure fee will be used to fund lead lateral replacement within Milwaukee's distribution system. Reference page 7 of Mayor Barrett's State of the City address included as Attachment E9-1 or online at http://city.milwaukee.gov/ImageLibrary/Groups/MayorAuthors/2018/SOTC/sotcAddress2018.pdf.

For information about the infrastructure fee, refer to the Water Service Agreement and Intergovernmental Agreement between the Cities of Milwaukee and Waukesha dated December 2017 included in Attachments E9-2A and E9-2B, respectively.

10. **Readiness to proceed:** Describe the readiness of the project to proceed toward development, including a demonstration by the prospective borrower that there is a reasonable expectation that the contracting process for construction of the project can commence by not later than 90 days after the date on which a Federal credit instrument is obligated for the project. [50 POINTS]

Multiple reviewing jurisdictions (eight states, two Canadian provinces, Wisconsin DNR, SEWRPC, and the City of Waukesha) have concluded that Waukesha has no reasonable water supply alternative to the switch to Great Lakes water that will be constructed and implemented under the Program. As described in Attachment B15-1, the WDNR is currently working closely with the city to obtain and review information that is required to issue required permits and while no permits have been issued for this project, the City of Waukesha has discussed the permitting with the DNR and together we have worked through all of the significant technical details. At this point in the process, nothing has arisen to change their view that it is approvable and permits will be issued.

In addition, Waukesha must meet a September 1, 2023 deadline for full compliance with state and federal drinking water standards for radium. It is on track to begin construction by January, 2020 in order to meet that deadline. A variety of agency coordination meetings have been held to discuss the Program, review coordination activities and schedules, discuss construction permit considerations, and identify items that agencies would like to be addressed. These initial meetings were held with the PSC, WDNR, Wisconsin Department of Transportation (WisDOT), Franklin, City of New Berlin (New Berlin), City of Muskego (Muskego), Town of Waukesha, Waukesha County, Milwaukee County, and the U.S. Army Corps of Engineers (USACE).These meetings have been held to proactively address concerns of the local authorities having jurisdiction to expedite the permitting and construction process.

Waukesha's Program is progressing toward a planned bid advertisement in November, 2019. As shown on the Program Critical Path Schedule in Attachment B11-1, the design will be complete and submitted to with Wisconsin Department of Natural Resources (WDNR) by July, 2019 for construction permits.

The following steps have occurred to position Waukesha to advertise for bid the construction of its new water supply:

- On June 21, 2016, the eight Great Lakes states making up the Compact Council approved the City of Waukesha's Diversion Application (see Attachment E10-1)
- In July 2017, the Utility's original Stipulation and Order for Judgment requiring complete compliance with the federal and state Radionuclide Standards by no later than June 30, 2018 was amended to require compliance or transition to the new Lake Michigan Water Supply by September, 2023 (see Attachments B5-3A and B5-3B)

- Water Supply and Return Flow Route Studies were completed in May 2018 (see Attachments B12-8A-F and B12-9A-I)
- The Preliminary Design Report was completed in May 2018 (see Attachment B4-1)

The following steps will take place to position Waukesha to advertise for bid the construction of their new water supply:

- Completion of design by October 2019
- Pipe Loop Testing Report completion by January 2020, with preliminary WDNR approval in June 2019
- Wisconsin Public Service Commission, Wisconsin Department of Natural Resources and Army Corps of Engineers Approvals in July 2019.

The Program has been strategically organized into multiple Contract Packages. Separate Contract Packages provide clarity to governing agencies who have responsibility for oversight of the design, permitting and funding requirements for both the potable and non-potable water systems. Additionally, separate Contract Packages allow greater opportunities for participation by local contractors and vendors, in conjunction with larger, national contractors, to work on the Contract Packages that include the type of construction that the firms specialize in. A diverse combination of local and national contractors with sufficient bonding and personnel capacities will allow for greater competition during bidding.

As the Program progresses through permitting and design, the Program Schedule will be reviewed and updated. As necessary, adjustments will be made to the plans for design, permitting and bidding in order for the Program to advertise bids no later than November 2019 and achieve the new water supply deadline in September 2023.

11. **Enables project to proceed earlier:** Describe the likelihood that assistance under WIFIA would enable the project to proceed at an earlier date than the project would otherwise be able to proceed. [10 POINTS]

The Financial Plan requires the use of interim financing to fund construction of the water supply Program Elements, due to limits in the Wisconsin Safe Drinking Water Loan Fund biennium funding levels. The interest rate on any revenue bond issues is anticipated to be, at a minimum, 100 basis points higher than WIFIA, with an even wider margin from the Wisconsin Safe Drinking Water Loan Program. Use of WIFIA funding would not only lower the overall cost of the project, it would allow the project to begin earlier as the majority of the financing would be in place before the bidding process would commence.

Lastly, the Utility's goal is to even out rate increases over time to minimize financial impact to rate payers and obtaining lower cost funding allows the project to progress sooner while keeping the rate increases as smooth as possible. Refer to Section D.4 of this Letter of Interest for more details on the Utility's financial projections.

12. **Financing plan:** Describe the extent to which the project financing plan includes public or private financing in addition to assistance under WIFIA. [10 POINTS]

    The Utility intends to finance the remaining 61% of the project costs using the State of Wisconsin's SRF programs and some general obligation debt. If the Utility does not receive the low-interest loans through the SRF or WIFIA programs, it will issue utility revenue bonds as necessary to complete the project.

13. **Reduction of Federal assistance:** Describe the extent to which assistance under WIFIA reduces the contribution of Federal assistance to the project. [10 POINTS]

    At this time, the project is not projected to receive federal funding, outside of the pass-through nature of Wisconsin's SRF programs. The WIFIA loan will increase the contribution of federal assistance to the project. The Utility will work with the Wisconsin SRF programs to maximize the local funding of each financing to assure that federal funding remains at or under the 80% federal funding maximum as stated in the WIFIA handbook.

Section F: Contact Information

1. Primary point of contact

Name: Joseph Ciurro
Title: Administrative Services Manager
Organization: City of Waukesha Water Utility
Street Address: P.O. Box 1648
City/State/Zip: Waukesha, WI 53187-1648
Phone: 262-409-4420
E-mail: jciurro@waukesha-water.com

2. Secondary point of contact

Name: Daniel Duchniak
Title: General Manager
Organization: City of Waukesha Water Utility
Street Address: P.O. Box 1648
City/State/Zip: Waukesha, WI 53187-1648
Phone: 262-409-4440
E-mail: dduchniak@waukesha-water.com

Section G: Certifications

Please sign in the appropriate space and submit a scanned version of the signature page to EPA with your electronic Letter of Interest submission.

1. *National Environmental Policy Act:* The prospective borrower acknowledges that any project receiving credit assistance under this program must comply with all provisions of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.)
2. *American Iron and Steel:* The prospective borrower acknowledges that any project receiving credit assistance under this program for the construction, alteration, maintenance, or repair of a project may only use iron and steel products produced in the United States and must comply with all applicable guidance.
3. *Prevailing Wages*: The prospective borrower acknowledges that all laborers and mechanics employed by contractors or subcontractors on projects receiving credit assistance under this program shall be paid wages at rates not less than those prevailing for the same type of work on similar construction in the immediate locality, as determined by the Secretary of Labor, in accordance with sections 3141-3144, 3146, and 3147 of Title 40 (Davis-Bacon wage rules).
4. *Lobbying:* Section 1352 of Title 31, United States Code provides that none of the funds appropriated by any Act of Congress may be expended by a recipient of a contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, or an employee of a Member of Congress in connection with the award or making of a Federal contract, grant, loan, or cooperative agreement or the modification thereof. The EPA interprets this provision to include the use of appropriated funds to influence or attempt to influence the selection for assistance under the WIFIA program.

   WIFIA prospective borrowers must file a declaration: (a) with the submission of an application for WIFIA credit assistance; (b) upon receipt of WIFIA credit assistance (unless the information contained in the declaration accompanying the WIFIA application has not materially changed); and (c) at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any declaration previously filed in connection with the WIFIA credit assistance.

   The undersigned certifies, to the best of his or her knowledge and belief, that:

   1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
   2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.
   This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

5. *Debarment:* The undersigned further certifies that it is not currently, nor has it been in the preceding three years: 1) debarred, suspended, or declared ineligible from participating in any Federal program; 2) formally proposed for debarment, with a final determination still pending; 3) voluntarily excluded from participation in a Federal transaction; or 4) indicted, convicted, or had a civil judgment rendered against it for any of the offenses listed in the Regulations Governing Debarment and Suspension (Governmentwide Nonprocurement Debarment and Suspension Regulations: 2 C.F.R. Part 180 and Part 1532.
6. *Default/Delinquency:* The undersigned further certifies that neither it nor any of its subsidiaries or affiliates are currently in default or delinquent on any debt or loans provided or guaranteed by the Federal Government.
7. *Other Federal Requirements*: The prospective borrower acknowledges that it must comply with all other federal statutes and regulations, as applicable. A non-exhaustive list of federal cross-cutting statutes and regulations can be found at: www.epa.gov/wifia.
8. *Signature:* By submitting this letter of interest, the undersigned certifies that the facts stated and the certifications and representations made in this letter of interest are true, to the best of the prospective borrower's knowledge and belief after due inquiry, and that the prospective borrower has not omitted any material facts. The undersigned is an authorized representative of the prospective borrower.

Signature: [redacted]

Date Signed: 7/30/2018

Name: Daniel Duchniak
Title: General Manager
Organization: City of Waukesha Water Utility
Street Address: P.O. Box 1648
City/State/Zip: Waukesha, WI 53187-1648
Phone: 262-409-4440
E-mail: dduchniak@waukesha-water.com

Section H: Notification of State Infrastructure Financing Authority

Please sign in the appropriate space and submit a scanned version of the signature page to EPA with your electronic Letter of Interest submission.

By submitting this letter of interest, the undersigned acknowledges that EPA will (1) notify the appropriate State infrastructure financing authority in the State in which the project is located that the prospective borrower submitted this letter of interest; and (2) provide the submitted letter of interest and all source documents to that State infrastructure financing authority.

Prospective borrowers that do not want their letter of interest and source documents shared with the State infrastructure financing authority in the state in which the project is located may opt out by initialing here _[redacted]_.

If a prospective borrower opts out of sharing a letter of interest, EPA will still notify the State infrastructure financing authority within 30 days of receiving a letter of interest.

Signature: _[redacted]_

Name: Daniel Duchniak

Date Signed: 7/30/2018